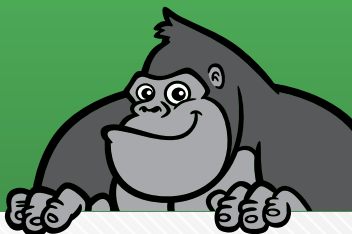


**THE
GORILLA
GUIDE TO...**®

EXPRESS EDITION



Digital Transformation for Small and Midsize Businesses

Ed Tittel

Inside the Guide

- The Challenges of Legacy Technology and Leaving It Behind
- Speed Up Setup, Configuration, Deployment, and Management Processes and Eliminate Errors with Automation
- Overcome SMB Financial Concerns and Limitations

THE GORILLA GUIDE TO...

Digital Transformation for Small and Midsize Businesses

Express Edition

By Ed Tittel

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CALLOUTS USED IN THIS BOOK



In the School House callout, you'll gain insight into topics that may be outside the main subject but are still important.



This is a special place where you can learn a bit more about ancillary topics presented in the book.



When we have a great thought, we express them through a series of grunts in the Bright Idea section.



Takes you into the deep, dark depths of a particular topic.



Discusses items of strategic interest to business leaders.

ICONS USED IN THIS BOOK



DEFINITION

Defines a word, phrase, or concept.



KNOWLEDGE CHECK

Tests your knowledge of what you've read.



PAY ATTENTION

We want to make sure you see this!



GPS

We'll help you navigate your knowledge to the right place.



WATCH OUT!

Make sure you read this so you don't make a critical error!



TIP

A helpful piece of advice based on what you've read.

INTRODUCTION

Maximum Opportunities for Growth and Innovation in Your Business

Welcome to this Gorilla Guide To...® (Express Edition) Digital Transformation for Small and Midsize Businesses! If you're looking to up-level from your current situation, this book is for you.

In today's world, yesterday's tools and technologies can impose an unwelcome drag on innovation, productivity, and profitability. Companies of all sizes and scales, including SMBs, are waking up to the power and promise of digital transformation to modernize and streamline their IT infrastructures, while seeking out opportunities to innovate, boost output, speed sales cycles, and improve ROI on technology spend.

HPE can help SMBs along the path to digital transformation, including automation tools to speed setup, configuration, deployment, and management of IT assets. HPE offers a helpful Solutions Wizard to help SMBs choose new IT equipment that's ready to tackle

their workloads, and offers intelligent provisioning with rapid setup capability to make new servers a snap to deploy right out of the box.

Making the most of IT assets nowadays also means using AI-driven management facilities, including proactive troubleshooting. HPE has SMBs covered for this with its InfoSight technology, which uses artificial intelligence and machine learning to extract insights and information from across its customer base to provide recommendations and anticipate issues in SMB IT environments.

This short guide will help you better understand the values and costs of your own SMB digital transformation, and how HPE can help you make it happen without undue disruption and maximum opportunities for growth and innovation in your business.

Let's enter the jungle now and get started on the journey of discovery. It starts with an overview of the things that are likely holding you back.

CHAPTER 1

The Challenges of Legacy Technology

Legacy systems involve hardware and software that may have once been widely used, and were even state of the art for their time, but are now passé and have been replaced or enhanced with something newer. Because technology evolves so quickly, it doesn't take long for current technology investments to become outdated.

The real catch is that, over time, older technology becomes less efficient and delivers a lower ROI than equivalent or more capable new technology. Thus, older technology may also not deliver the latest or best user experiences. Perhaps more disturbingly, older technology might hinder a business from delivering experiences as quickly or securely as customers like. In particular, security issues pose additional risks or open companies to fines and penalties when compliance requirements aren't met.

The sorry truth is that many small businesses (and business owners) hang onto legacy systems longer

than they should. In fact, keeping outdated technology in service can raise costs and reduce productivity. That's why the benefits of replacing outmoded technology more than offset the risks involved in retaining legacy systems.

Where Legacy Can Fall Short

There are several areas in which legacy systems can pose expensive, sometimes business-crushing challenges. As shown in **Figure 1**, these include:

- **Maintenance** The time, effort, and cost involved in maintaining legacy systems can weigh heavily on small businesses seeking to manage and optimize budgets.

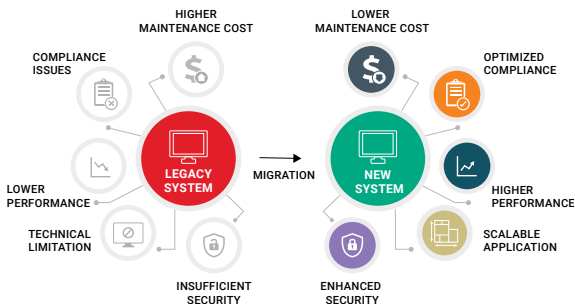


Figure 1: The issues SMBs face with legacy systems

- **Security** While software and hardware vendors routinely provide patches, updates, and fixes to address threats and vulnerabilities, end-of-life (EOL) comes to every program and platform sooner or later. New technologies frequently include security enhancements that can't be added to older technology.
- **Compliance** For businesses that must comply with various regulatory frameworks or regimes (such as HIPAA, PCI, SOX, GDPR, and so forth) technology must be secure and supported, backed up with audits to check and confirm compliance. Compliance failures can lead to civil or criminal penalties, and punishing fines.
- **Increased Failure Rates** As systems age, they can't help but start pushing the limits on their mean time between failure (MTBF) ratings. This makes downtime inevitable. Its consequences can be severe, including outright loss of customers and revenue if systems become inaccessible or unavailable.
- **Compatibility issues** Legacy systems are often incompatible with newer systems. This locks them out of new technologies and can pose high (if not impassable) hurdles to adopting and integrating cloud-based services and solutions.
- **Limited mobility** For businesses with employees in the field (delivery services, logistics, construction,

consulting, and so forth) legacy systems may be hampered in supporting or unable to employ mobile devices to access inventory, accounting, customer data, and other functions. Because mobile devices—especially smartphones and WLAN-equipped handheld and laptop computers—are increasingly essential for effective field operations, this could negatively impact the bottom line.

All in all, SMBs need not look too hard or too far to find plenty of good reasons to update, upgrade, or replace legacy technologies. Ultimately, it's about lowering the TCO, improving reach and productivity, and introducing more opportunities to enhance existing products and services and introduce new ones.

Leaving Legacy Behind

The biggest reason to adopt new technology and to take legacy technology out of the picture comes from the opportunity costs that maintaining and operating legacy technologies impose on a business:

- When IT expends significant time and effort keeping legacy technology working, its people can't tackle tasks calculated to find new customers and new experiences, or make existing customers more satisfied with their current experiences.

- Likewise, when too many resources get allocated to maintaining an aging status quo, there's no opportunity for IT to tackle research and development. This robs them of opportunities to innovate and to seek competitive advantages.
- Growth and improvement come most readily when IT staff has the opportunity to do its current job better (and more quickly). Some might even argue that keeping technology current is IT's job, along with ensuring the best possible ROI on technology investments.

Legacy or Otherwise, Security Matters

To protect themselves from risk, harm, and loss, companies must take security seriously. This is especially important when it comes to managing customer data of many kinds, including personally identifiable information (PII), financial or account data (including accounts, transactions, credit card information, and so forth), and other data subject to compliance regimes or regulatory control.

In today's world, new security threats crop up by the thousands every day. Legacy technology is especially vulnerable to security threats and exploits because

it's been around long enough to pile up considerable (and well-documented) avenues and means of attack. In addition, legacy technology may be unable to meet ever-evolving compliance requirements (as with the July 2020 invalidation of the [EU-US Privacy Shield](#)). This exposes companies to potential risks and losses they have no choice but to accept until they can put newer alternative technologies in place. For most businesses, involuntary risk exposure goes beyond what they can tolerate.

The High Costs of Securing Legacy Technology

According to [CSO Magazine](#) (March 2020), 60% of security breaches in 2019/2020 involved vulnerabilities for which a patch was available but hadn't been applied. Too many organizations—of which the greatest number by statistics and reported breaches are SMBs—experience losses related to theft, downtime, and damage to reputation because they don't (or can't) take simple preventive measures to manage and reduce security risks and exposures. This is one area in particular where automation has an outsized influence and impact, as discussed in the following section. Legacy technology can be especially prone to vulnerability and attack, particularly in terms of its pre-boot environments (such as firmware, BIOS, and

UEFI) because vendors typically stop patching and updating those environments once devices are more than 5 to 10 years old. When vulnerabilities and exploits target legacy hardware, there's often no hope for patches or fixes to fend them off.

The Benefits of Automation

Finally, new technology brings added capabilities that act as a “force multiplier” for IT staff productivity. In particular, the automation that new technologies bring to the workplace—such as HPE InfoSight, HPE Integrated Lights-Out, and HPE OneView—provides profound benefits to SMBs that deploy them. Automation helps IT staff turn repetitive tasks over to scheduled, software-based tools that can perform them far more quickly and accurately whenever they're needed (and such tasks can also be run on-demand or be triggered by specific events).

Though learning automation techniques and tools aren't trivial, the payoffs are immediate and substantial. Because it can be tested and validated to make sure it works correctly every time it's used, automation prevents human error from affecting routine tasks and activities, no matter how simple and straightforward they might be, or how time-consuming and complex they often are.



THE MANY WAYS AUTOMATION EASES IT'S BURDEN

Automation works across the entire IT lifecycle to assist at each step along the way. Thus, automation plays a role in defining, configuring, setting up, and deploying IT infrastructures, services, applications, and more.

Further automation can be used to provision virtualized and physical environments, whether on-premises or cloud-based (or as is increasingly the case, some combination of the two). The same automation tools cover maintenance and upkeep, including patches, fixes, and updates (and can even cover pre-OS components such as firmware, BIOS or UEFI elements, along with device drivers, APIs, frameworks, and more).

Automation also helps IT keep up with security monitoring and management, including vulnerability scans, update deployments, and remediation or mitigation tasks when warranted. Likewise, automation helps businesses stay on top of IT assets, related usage and licensing requirements, and cost optimization for IT resource consumption. It truly covers a broad range of IT tasks and activities.

Free Up Valuable Time

The real benefit of automation, of course, is that it frees up time for IT staffers who might otherwise spend their days maintaining legacy technologies. That time can then be better spent on researching and developing new products and services, selecting and deploying new technologies, and thinking of more and better ways to deliver value to customers, employees, and business owners. The potential gains pose certain rewards to SMBs smart and savvy enough to put automation to work wherever and whenever the opportunity presents.

Once a business owner or IT manager at an SMB starts to understand the potential value of digital transformation, they will want to know exactly where that value comes from. Of course, they'll also want to know how it looks and works for them. In the next chapter, we'll examine a powerful source of value-add from digital transformation—namely the benefits that automation and related tools can provide. In particular, the focus will be on ways to simplify, streamline and speed up the process of new technology introductions. In large part, this comes from HPE's ability to help SMBs move quickly and efficiently through processes involved in setting up, configuring, and deploying new technology, software and systems.

CHAPTER 2

Setup, Configuration, and Deployment

Digital transformation is the evolution of business activities, processes, competencies, and models to fully leverage the opportunities and capabilities of new digital technologies. Modern businesses, including SMBs, are under considerable pressure to grow and improve by implementing such new technologies. The overall goal is to bring customers, partners, and suppliers together in real time, and empower employees to maximize their productivity.

HPE drives three primary outcomes for its customers: efficiency, agility, and innovation.

- **Efficiency** comes from task automation that drives technology costs down, freeing up funds for other projects and activities.
- **Agility** comes from process orchestration, which improves timely execution and reduces the time necessary to respond to business requirements.

- **Innovation** occurs when the gains from improved efficiency and agility free people, time, and resources to identify, pursue, and implement new or improved business processes and capabilities.

HPE can help SMBs achieve their own digital transformations across the entire technology lifecycle. To that end, HPE can help SMBs deal with issues related to device setup, configuration, and deployment.

About Setup, Configuration, and Deployment

When new technology assets—particularly hardware, but often various software components, as well—are acquired, SMBs must set them up, configure them, and deploy them into their intended use locations. To make sure you appreciate the nuances that distinguish these terms, here are some definitions:

- **Setup:** Assembling the physical pieces and parts that comprise equipment, applying power for basic testing, and ensuring all ordered components are present and working
- **Configuration:** Adding appropriate settings, preferences, and options to make a device and its software ready to function, including network addresses,

access to local directory services and admin accounts, proper access controls and filesystem structures, and so forth

- **Deployment:** Staging equipment to its intended use location, making all necessary connections (logical and physical), and testing to make sure that setup and configuration are valid and working and that the equipment and its software are ready to use

Speed Up Processes and Eliminate Errors with Automation

The processes involved in setup, configuration, and deployment that don't involve hands-on assembly or moving equipment are quite amenable to automation. This means that admins can create scripts or make use of tools to perform most of the work. This helps to speed up the process because it replaces tedious, manual, individual entries and user interface (UI) navigation with a series of well-tested equivalent instructions. It also helps avoid error because it eliminates nearly all opportunities for human operators to make mistakes.

What kinds of SMB scenarios might lend themselves to automation? Consider two brief examples: First, automation can help an SMB select the right server model, equipped with the processing, networking,

and storage capabilities to suit its intended purpose. Upon delivery, that server can be readied for use through judicious interaction with provisioning and setup tools designed to deliver working, reliable systems in short order. Second, an SMB might choose to deploy a database or some kind of application service running on a server. The same set of tools—and the same productivity boost—again applies.

As this chapter will explain, HPE offers powerful, usable tools and technologies to help SMBs deal with typical setup, configuration, and deployment scenarios like the ones just described.

HPE Solutions Wizard

HPE has heard from its customers that all too often sizing a business' technology needs can be complicated and overwhelming when trying to find the right solutions. The HPE Solutions Wizard takes your needs into account with a few simple filters and gives you the right solution in as little as two minutes. The HPE SMB Solutions presented are tested and validated configurations that simplify the selection process by providing a complete configuration right-sized for many SMB use cases.

Fast and Simple Access

First, navigate to <https://www.hpesmbolutions.com/smb/> to access the Solutions Wizard. When you first arrive, there are simple instructions that guide you through the two-minute process. Working through the Solutions Wizard is fast and simple, and will quickly show you how this tool helps SMBs identify and configure the kinds of hardware solutions they need to meet their IT needs.



When you visit the Solutions Wizard, you'll find simple instructions to guide you through its typical two-minute process. The Wizard's column headers are intended to give you the most relevant, technical information about related hardware's internal components (see **Figure 2**).

Once you're ready to begin you can see a list of filters at the top that let you refine your solutions search. Start by selecting a use case that fits your business needs.

From there, select an optimization that fits your need. Performance servers are the best of the best, Balanced finds the sweet spot between performance and cost,

Welcome to the HPE Solutions Wizard.

In less than **2 minutes** we will help you find the right-sized cost-effective server, storage and network solutions that will solve your business needs and get you prepared for future growth.

Use Case
☐ File
☐ Virtualization
☐ Backup / Archive
☐ Small Office Deployment

Optimization ?
☐ Application
☐ Database
☐ Shared Storage
☐ HCI

Expandability ?
☐ Performance
☐ Balanced
☐ Cost

Operating System
☐ Microsoft
☐ VMware
☐ CentOS

Form Factor
☐ Rack
☐ Tower
☐ Micro Tower

[Instructions](#)
[Reset Filters](#)

SMB Solution Description	Solution Components	CPU # Sockets Installed Frequency # Cores/CPU Brand	Memory Installed (Maximum)	Drive Bays Installed/Available/Maximum (* Requires Optional Hardware)	Total Data Storage Internal (External)	Networking	Details
ML30 File Solution	ML30 Gen10 8SFF Server	1 Socket(s) 1 CPU(s) 3.4 Ghz 4 Cores Intel	32 GB (64 GB)	8 / 2 / 8 Internal 0 / 0 / 0 External	4.8 TB (0 TB)	2x 10GbE	60
ML30 Archive Solution	ML30 Gen10 4LFF Server	1 Socket(s) 1 CPU(s) 3.4 Ghz 4 Cores Intel	16 GB (64 GB)	4 / 0 / 4 Internal 0 / 0 / 0 External	4 TB (0 TB)	2x 10GbE	60
		1 Socket(s) 1 CPU(s) 3.4 Ghz 4 Cores Intel					

Found 99 Others

Figure 2: The HPE Solutions Wizard helps SMBs select the right solution in as little as two minutes with helpful filters that refine the solutions search

and, finally, Cost is focused on providing the most value for your dollar. These optimizations are compared to all other solutions that we offer in the same use case.

Next, choose expandability, which is the degree to which the solution can be expanded from the default Solution configuration. This takes into account CPU, Memory, Storage, and Networking. Generally, more expandable systems have a higher cost than systems with low expandability.

Choose an operating system (OS) and form factor to further refine your selection.

To get more information on your new, sized solution you can select the magnifying glass icon underneath the details header on the right-hand side. Once you click on it you can see what components are included with the server, required additional hardware and software to satisfy the use case, and recommended hardware and software to help you maximize your new solution.

The wizard also gives you the functionality to visit the solution in the HPE store, open the solution in iQuote to work with your favorite distributor, or export the bill of materials (BOM) to send to a colleague or preferred partner.

All SMB Solutions have key resources that help you deploy your use case or view a solution brief that gives a high-level overview of the system. These documents are listed along with a link to QuickSpecs to get more technical information on the server.

In a matter of a few minutes, you can successfully size and select an HPE SMB validated solution that can be fulfilled through [iQuote](#) or the [HPE store](#). When you're ready to start again, reset your filters and refine your ideal settings to see a solution that will best suit your needs. HPE is focused on getting you back to what matters most—your customers.

HPE Intelligent Provisioning with Rapid Setup

Once a server is delivered to your premises, HPE helps automate and expedite the rest of the setup-configure-deploy triad with two highly automated and intelligent tools: [HPE Intelligent Provisioning](#) and HPE Rapid Setup. Following are descriptions of each tool.

HPE Intelligent Provisioning is a single-server deployment tool embedded in the HPE Integrated Lights Out (iLO) management utility of ProLiant servers and HPE Synergy compute modules. It simplifies server setup, providing a reliable and consistent way to deploy servers. HPE Intelligent Provisioning features the Rapid Setup tool described in the next section, but also includes an Always On Intelligent Provisioning facility, maintenance utilities, firmware updates, improved installation wizards, advanced Basic Input/Output System (BIOS) settings, and Enhanced Secure Erase to safely and completely delete all data on hard drives.

The Always On feature allows access to Intelligent Provisioning from the iLO browser UI anytime without having to reboot your server. It provides ready access to advanced BIOS settings to enable, disable, and configure devices at a low level on the server, even before an OS is loaded.

Intelligent Provisioning enables complete custom server setup from start-up to installing the OS. This is ideal when you need special configuration of the server to prepare it for a unique use case. But for common single-server and SMB use cases, Intelligent Provisioning also provides HPE Rapid Setup for even faster deployments.

HPE Rapid Setup now appears as a server and OS deployment option within the HPE Intelligent Provisioning environment (requires 3.31 release or higher and works with all HPE ProLiant 10, 100, and 300 series Gen10 Servers).

Rapid Setup automates server deployment by inventorying the installed components and then presenting a recommended configuration based on best practices. If the recommended configuration is accepted, all that's needed is to provide the OS installation file location and Rapid Setup will automatically configure the server RAID configuration and install the OS, and even update drivers and server firmware if desired.

Of course, if the recommended configuration doesn't meet your requirements, Rapid Setup will provide the opportunity to manually configure the server using a simplified interface that's easy to use.

Rapid Setup also supports or includes the following to help with setup, configuration, and deployment:

- Windows OS, along with Hyper-V and VMware virtualization environments
- ClearOS
- BIOS configuration utility
- Hardware validation tool
- Tools for updating software and firmware
- Integrated ability to access HPE support and other online resources

Start Your Digital Transformation Today

All in all, HPE Intelligent Provisioning and HPE Rapid Setup make it as simple and straightforward for SMBs to work through the setup, configuration, and deployment processes as modern technology will allow. Seeing is believing: Ask HPE to provide a demo and you'll be able to watch it work for yourself. You can also watch the [HPE ProLiant Gen10 Rapid Setup](#) demo on YouTube. Or, you can check out the [Solutions Wizard](#) for yourself. Then, visit the [HPE Intelligent Provisioning](#) home page for more information, downloads, and resources. It's

never been easier to start your SMB down the path to digital transformation.

Once equipment has been purchased, delivered, installed, configured, and deployed, the real IT work begins. More than 80% of the lifecycle for typical IT infrastructure and equipment is spent on maintenance, management, and upkeep. In fact, IT is responsible for all that work. Anything that boosts productivity, speeds task completion, and improves accuracy and reliability during maintenance mode is a huge win—especially for the IT staffs charged with making all this happen and taking care of the business along the way. In the next chapter, we turn our focus to the topics of management and automation, to explain how automation can save IT time and effort, while also ensuring rapid response to issues and problems, and accurate, reliable handling of maintenance tasks.

CHAPTER 3

Management and Automation

Set up, configuration, and deployment are relatively easy for IT, because those tasks don't happen terribly often (typically, only when new equipment arrives, or upgrades must be added to existing equipment). But management and maintenance are literally for the life of the solution, and happen every day. HPE understands that even modest improvements in regular, repeated activities can pay big dividends over time. The company also sees that eliminating human error, and speeding task completion add up nicely, too. In this chapter we'll explore the important roles that proper management tools and good use of automation can play to significantly boost IT's capabilities, productivity, and reach. In an era of "doing more with less," management and automation help IT organizations do more, faster, and better than they otherwise could.

Management and Automation in the SMB Infrastructure

Within IT, management means more than simply watching over and taking care of systems, assets, and

infrastructure. It covers the entire IT lifecycle from initial determination of needs and requirements; to evaluation and selection of technologies, tools, and platforms; to negotiating purchase and support costs; to installation and configuration; through upkeep and maintenance and ongoing review; all the way to decommissioning and proper surplus operations or outright destruction at end of life (recommended for old storage media used for sensitive data, for example).

In fact, management has been a formal IT discipline for over three decades. That's long enough for the initial management model to become outmoded and be replaced with something newer and more robust. The early model was sometimes called FCAPS: for fault, configuration, accounting, performance, and security, all management categories covered under that model. Modern IT management falls under the heading of IT Service Management (ITSM). These days, ITSM means understanding the IT lifecycle, and how delivering quality IT is itself a service discipline that follows an agile DevOps-inspired approach called CI/CD—continuous integration along with continuous delivery.

In IT, automation generally refers to the use of recorded and repeatable instructions or directives that do programmatically what an IT professional does manually (by entering commands, running a user interface, using

tools and utilities, and so forth). Once automated, software tools, frameworks, and appliances can handle tasks with little or no human interaction. IT automation has a broad scope that runs all the way from single actions, to specific sequences of instructions, to full-blown IT deployments whose actions respond to security incidents, user behaviors, or specific event or value triggers.

Proper use of automation tools and frameworks can help IT (and businesses of all sizes and scales, including SMBs) be more productive and responsive to users and stakeholders. First, automation runs much faster than human-computer interactions can. In fact, automation is hundreds to thousands of times faster than manual input, especially for simple, routine tasks. This makes proper automation especially useful for incident response because it can move as quickly to defend as an automated attack can proceed. Second, because automation can (and should) be tested rigorously to make sure it works without errors or issues, it's also more reliable than human input once it's put into production. Given access to results from analytics, cost, or performance monitoring data, automation can also take action to limit resource consumption when costs exceed a preset minimum or when resource consumption spikes.

In general, proper use of automation helps IT (and the businesses it supports) be more productive and

responsive to changes in demand or resource requirements. Typical uses of IT automation in SMB operations include:

- Monitoring networks, servers, and clients for health
- Tracking vulnerabilities and update status
- Automated deployment of patches, fixes, and updates

Because automation helps IT do more—and do things faster and more reliably—it's a huge boon to SMB IT teams, which often work under tight resource constraints (especially headcount).

In the sections that follow, you'll learn more about some HPE offerings that can be of particular help and value to SMBs and their IT organizations.

Gain AI/ML Insight with HPE InfoSight

Artificial intelligence and machine learning (AI/ML) can deliver valuable benefits to SMB IT organizations. The intelligence and insights that AI/ML provide often prove particularly helpful in organizations where human resources are tight, and spare bandwidth to cover strategic analysis and planning may simply be unavailable. A management philosophy called AIOps is emerging in IT, whereby insights and information elicited from AI

models and analyses is immediately put to work to help organizations make better, more efficient use of the IT assets and resources available to them (both on-premises and in the cloud). And, of course, automation plays a key role in such capability because it provides a reliable, well-tested framework within which speedy, program-driven IT management becomes possible.

HPE InfoSight, a predictive analytics tool that uses AI and ML to address IT issues before they can impact the infrastructure, has over 10 years of collecting telemetry data and retraining ML models. Each second, millions of sensor measurements capture the state of systems, subsystems, and surrounding IT infrastructure within thousands upon thousands of organizations. This data is collected and analyzed across the entire HPE global installed base. More data leads to greater insights and enables HPE InfoSight to make more intelligent decisions and recommendations. A global intelligence engine sits at its heart. This is where cloud-based ML comes into play. From the insights the intelligence engine provides, HPE InfoSight can:

- Make recommendations
- Provide proactive wellness, monitoring, and adaptive behavior through global learning
- Create and apply workload fingerprints

- Apply predictive analytics
- Automate support wherever and whenever possible

By leveraging analytics collected across countless HPE customer platforms around the world, HPE InfoSight iterates through innumerable cycles of observing-learning-predicting-recommending-acting. This process allows advanced visualizations and dashboards for users and supports a fully workload-optimized infrastructure.

For most SMBs, HPE InfoSight lets them optimize IT performance, as the global data patterns let them predict and prevent problems before they become serious. HPE InfoSight also helps make infrastructures smarter and keep improving themselves, based on observation and repetition of what works best for current situations and circumstances. Thus, HPE InfoSight helps SMBs make their IT assets more available and reliable, and assists in optimizing application performance and in planning for growth and expansion of IT resources. When HPE Pointnext Services comes into the picture, its consultants can offer further recommendations to optimize workloads and enhance productivity.



HPE POINTNEXT SERVICES SPECIALIZES IN DIGITAL TRANSFORMATION

HPE's Pointnext Services can help IT organizations plan and do more by tapping the expertise of HPE's own consulting staff (who may have skillsets that are difficult or impossible to develop in-house in an SMB). Pointnext Services helps customers go beyond traditional hardware support to offer recommendations on how to optimize and run their workloads better, cheaper, and faster. All in all, [HPE Pointnext](#) offers SMBs the precious commodity known as "peace of mind," secure in the knowledge that their IT operations are effective and optimal. HPE Pointnext is ready to help SMBs design their own digital transformations with the benefit of expert and insightful IT consulting.

Management Efficiency with HPE Integrated Lights Out (iLO) Facility

The HPE Integrated Lights Out (iLO) facility is a toolset designed to manage servers efficiently, resolve issues

quickly, and keep businesses running. Better yet, iLO works from anywhere and provides all firmware, drivers, and tools needed for installations and upgrades. It also makes HPE servers immediately ready to provision and configure, right out of the box.

iLO's integrated system and OS configuration tool simplifies and speeds up server installation and setup, supports rapid setup capabilities, and works with HPE OneView automation. iLO also offers important security features. These include a silicon-based root of trust that prevents malware (especially rootkits) from inserting itself into hardware before the boot process (and OS start-up) completes. iLO provides a server configuration lock to prevent unauthorized changes, and includes a one-button secure erase tool to remove all previous content when a new server image gets installed. In general, HPE iLO supports the world's most secure industry-standard servers (see the "HPE Secure Compute Lifecycle: Building on the world" most secure industry standard servers to optimize your security environment" [whitepaper](#) for more information).

In addition to basic iLO functions built into HPE ProLiant servers, available upgrade options include the following:

- graphical remote console (free until end of 2020)

- multi-user collaboration
- video record/playback
- discover, inventory, and update OS, applications, drivers, and firmware

All this capability makes HPE iLO a real workhorse for SMB server operations. In the following section, you'll learn about HPE OneView, a general IT infrastructure management and automation toolset, which also includes all of the HPE iLO capabilities.

Automate Your Infrastructure with HPE OneView

HPE OneView provides an integrated, general-purpose IT infrastructure management platform. It also supports automation of IT operations through workflows, along with a modern dashboard (**Figure 3**) and a comprehensive partner ecosystem. HPE OneView uses software-defined intelligence to enable automated infrastructure provisioning with repeatable, easy-to-use templates. These templates ensure high reliability, consistency, and control, and can lead directly to lower operating expenses.

HPE OneView also helps to simplify lifecycle management for all common IT resources, including computer, storage, and networking. IT administrators can

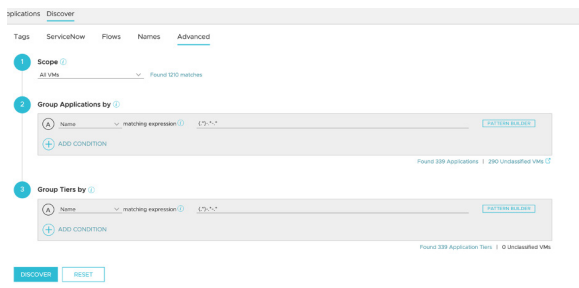


Figure 3: The HPE OneView Global Dashboard helps IT staff troubleshoot alerts and view core inventory data for up to 75 HPE OneView appliances and 20,000 servers in multiple data centers across the globe

compose on-premises physical infrastructure quickly and easily, because that physical infrastructure is defined using software. This makes the infrastructure directly programmable (and easy to automate), and lets you manage it as you'd manage code—through a single, unified API. Better yet, HPE OneView gives IT administrators the tools they need to connect their software-defined infrastructure from core to cloud by provisioning a turnkey private-cloud infrastructure through its partner ecosystem (including various Microsoft Azure and VMware offerings; see the [HPE Infrastructure Automation Made Simple](#) brief).

HPE OneView supports the HPE product portfolio, including its servers, storage, and networking equipment. For all those IT elements, HPE OneView provides simple and automated management of infrastructure and assets. For more information please visit the [HPE OneView](#) home page.

Moving from Technical to Cost Controls

In modern IT operations, management tools and insights provide information, control, and overview of systems and infrastructure. But SMBs also need cost controls and financing options to put digital transformation to work in their businesses. In the next chapter, we'll examine the various programs and plans that HPE Financial Services offers to SMBs, to let them keep doing business even while planning, implementing, and deploying new IT tools and technologies to make digital transformation both possible and profitable.

CHAPTER 4

Cost Controls

SMBs, like all business, run on money, and exist—at least in part—to make money. HPE understands that SMBs need funding to pay for digital transformation, and must have means to cover their expenses while that transformation is underway until it starts paying off. HPE Financial Services (HPEFS) offers a number of interesting and innovative programs and payment plans to help SMBs start on digital transformation sooner, and let the funding take care of itself over time. Read on to learn about a plethora of programs designed to let SMBs trade current costs against current and future earnings in a variety of ways, including a form of technology subscription.

Overcoming SMB Financial Concerns or Limitations

HPE can help SMBs accomplish their own digital transformations while controlling costs. SMBs always seek ways to preserve cash flow, defer or reduce expenses, and relieve capacity strains and delivery delays. To those ends, HPE Financial Services promotes financial

vitality with a portfolio approach to IT investments, including financing, subscription, and asset lifecycle management programs.

By aligning tech assets and business objectives, SMBs can:

- Conserve cash and enjoy predictive pricing through a subscription program
- Manage budget across all company priorities and goals
- Find value in legacy assets to fund new technologies to replace them
- Help ensure business continuity and viability by addressing new technology financing needs
- Cost-effectively manage assets across initiatives and their entire lifecycles

HPE Financial Services has a long history of both financial and technical acumen that, when combined, helps customers create an IT playbook with its SMB customers to help them understand the financing options available to them. This IT playbook helps SMBs ensure that they're taking advantage of the best financing solutions available, staying agile and delivering on business goals.



HPEFS PAYMENT DEFERRAL

HPE Financial Services offers a 90-day payment deferral program. This lets SMBs acquire new technology immediately with no payments for up to 90 days, followed by 36 low monthly payments. The full portfolio of HPE servers and systems, networking, and data storage hardware falls under this umbrella.

HPEFS Programs of Interest to SMBs

In addition to industry-standard IT financing options, HPE Financial Services offers a number of finance programs designed to let SMBs cover the costs of a technology refresh or a digital transformation without straining cash flow or threatening business productivity. HPE's programs are designed to bridge the gap between finance and technology, when businesses may need funds to supplement their own resources, as shown in **Figure 4**. Five such programs are described in the subsections that follow.



Remove funding barriers to acquiring new technology



Manage IT assets and resources to support growth and boost operation efficiency



Proactively prepare for innovation and expansion to maintain your competitive edge

Figure 4: When internal funding isn't enough to cover costs for digital transformation, HPEFS can help!

Generate Cash from Existing Assets

HPEFS helps SMBs free up value from their existing technology assets, which may be converted into capital to purchase new or upgraded technology. Such an incremental capital resource helps close gaps in IT outlays. It also gives SMBs added flexibility to fund other aspects of their businesses. HPEFS can even buy back an SMB's excess newer-generation

technology that it no longer needs or wants. Since 2018, HPEFS has turned such assets into \$642M for its clients and customers.

Subscribe to Complete IT Solutions

To give SMBs an unparalleled opportunity to obtain affordable and timely access to the right IT tools and technologies, HPEFS offers subscription plans for new technology purchases. With delivery and installation guaranteed within a short time after starting a subscription, SMBs can begin using their new capabilities quickly. This program includes seamless upgrades and refresh elements, so SMBs that buy into the program are automatically pricing in upgrades and updates for the foreseeable future.

Match Payments to Production

HPEFS offers SMBs a phased deployment program that lets them acquire compute and storage capacity immediately. They can then take the time they need to configure, test, and deploy systems before making any payment. This allows SMBs to keep their essential business activities up and running, without having a huge impact on their budget cycles and implementation timelines. Under this program, a deployment schedule can extend as long as 12 months, giving SMBs

up to a year to pay for purchases they can put to work immediately, paying only when the equipment starts generating income to offset their costs.

Optimize Legacy Environments

HPEFS offers certified, pre-owned HPE technology to address certain typical SMB situations at reduced cost. Such offerings can be worthwhile for SMBs that need to support legacy applications, ensure business continuity, or provide additional capacity and capability to meet peak or seasonal demands for compute, storage, and networking resources.

Short-Term Rentals to Relieve Capacity Strain or Delivery Delays

Finally, HPEFS offers short-term rentals from 3 to 12 months for pre-owned HPE technology, and up to 12 months for new HPE PCs. In this way, HPEFS helps SMBs fill gaps resulting from migrations or unplanned impacts to the business (like those prompted by nearly universal work from home regimes in many or most SMBs, which need PCs suitable for their remote workers). Such technology comes factory-configured to meet the SMB's specifications, includes a standard warranty, and is eligible for HPE Pointnext Services support and further warranty extensions.

Other Options for SMBs

In addition to these programs, HPEFS offers other options that may be of interest to its SMB customers, including:

- **HPE Adaptable Use Models:** HPEFS offers such models to its customers as an investment solution with configurable capabilities. SMBs can choose a monthly payment plan with an option to adjust payments up or down based on pre-planned contingencies or needs. This approach gives SMBs more flexibility in managing an extended deployment schedule. It can also help them cope with uncertainty in forecasting IT demand or in taking on the risks involved in a pilot project.
- **Asset Upcycling Services** SMBs that choose to cash in on existing legacy IT assets to finance acquisition of new technology must make sure their old technology can't be misused or lead to unwanted information disclosures. HPE's Asset Upcycling Services apply secure overwriting to any storage media traded in. It also guarantees environmentally responsible removal and recycling for all technology, whether it's to be repurposed or retired from service completely.
- **Payment Deferral and Pay-as-You Grow** HPEFS offers a variety of payment plan options so SMBs gain flexibility in financing—and paying for—their

digital transformations. Payment deferral permits outlays to be delayed by up to 90 days under certain circumstances (talk to HPEFS). Pay-as-you-grow plans allow SMBs to take advantage of graduated payments, which start small as new technology gets deployed and grow bigger as that technology starts paying for itself and generating additional revenue.

- **HPE Pre-Provisioning** This solution lets SMBs obtain quick access to pre-configured, ready-to-run servers, VMs, and other technologies in advance of actual need. A variety of pre-provisioning options for hardware and services are available from HPEFS, so be sure to inquire as to how this might help your business grow as circumstances dictate.
- **HPE Subscription for Servers** This is the name of the HPEFS offering that enables SMBs to select a complete technology package from a set of pre-defined options that includes best-in-class computer, storage, and networking hardware, software, accessories, and HPE Pointnext Services for a predictable monthly fee. SMBs simply subscribe, use, return, and renew as they need to, with the option to add to their subscription for more capability and capacity at any time.

HPE Financial Services stands ready to assist and enable its SMB customers to take advantage of the

improvements in efficiency, productivity, and profitability that a digital transformation can bring. When you interact with HPE, be sure to ask HPEFS about how it can help your business do and be its best through careful and considered acquisition of IT tools and technologies. HPEFS can help you find the best way for your business to do what it needs to, at an affordable price, on comfortable terms.

For more information, please visit the IT Financing Solutions for Small and Midsized Businesses or the HPEFS pages.

Making Digital Transformation Happen in Your SMB

We've reached the end of our journey! Throughout this Gorilla Guide, you've learned a lot of information that can help you get more done, and get out ahead of the business curve instead of always playing catch-up.

You've seen that HPE has the solutions, along with powerful management and automation tools, to make the technology necessary to support digital transformation easy to choose, install, set up, configure, and deploy. More importantly, HPE also has a variety of offerings—including HPE InfoSight, HPE OneView, HPE iLO and more—to make a modern new IT infrastructure easy to manage and maintain.

This includes powerful, reliable automation facilities and capabilities designed to make IT more productive and efficient, and less prone to delay and error. And, finally, HPE offers a variety of financing and payment plans and programs to help SMBs put digital transformation to work sooner, rather than later, to help them start reaping its benefits more quickly. Please visit HPE SMB to start your digital transformation journey today.

ABOUT HPE



Hewlett Packard Enterprise

Grow your business with small business IT solutions that power your key ambitions and help you achieve big goals. Explore how HPE small business IT solutions can best serve your small and midsize business needs.

www.hpe.com/smallbusiness

ABOUT ACTUALTECH MEDIA



ActualTech Media is a B2B tech marketing company that connects enterprise IT vendors with IT buyers through innovative lead generation programs and compelling custom content services.

ActualTech Media's team speaks to the enterprise IT audience because we've been the enterprise IT audience.

Our leadership team is stacked with former CIOs, IT managers, architects, subject matter experts and marketing professionals that help our clients spend less time explaining what their technology does and more time creating strategies that drive results.

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